UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,130	12/08/1998	DANIEL VIERA CONRAD	RA9-98-053	6377

47052 7590 07/01/2005	EXAMINER
SAWYER LAW GROUP LLP	ROBINSON BOYCE, AKIBA K
PO BOX 51418	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

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09 207,130			

EXAMINER

ART UNIT	PAPER
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Commissioner for Patents

The following is a supplemental examiner's answer to replace the examiner's answer filed 8/16/04. The supplemental examiner's answer now includes the "References of Record" section.

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/207,130
Filing Date: December 08, 1998
Appellant(s): CONRAD ET AL.

Joseph A. Sawyer, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/1/04.

(1)   Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2)   Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly

affect or be directly affected by or have a bearing on the decision in the pending appeal

is contained in the brief.

(3)   Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4)   Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection

contained in the brief is correct.

(5)   Summary of Invention

The summary of invention contained in the brief is correct.

(6)   Issues

The appellant's statement of the issues in the brief is correct.

(7)   Grouping of Claims

The appellant's statement in the brief that certain claims do not stand or fall

together is not agreed with because the appellant states that there are four separate

groups, however, appellant does not technically argue each group. Appellant only

makes arguments for claim 1. For these reasons, the examiner will constructively group

all pending claims to stand or fall together in the same group.

(8)   Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9)   Prior Art of Record

5,088,033   BINKLEY et al   3-1990

5,812,668   WEBER   6-1996

(10)   Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Binkley, et al (US Patent 5,088,033), in view of Weber (US Patent 5,812, 668).

As per claims 1, 2, 7, 8, 9, 14, 15, Binkley, et al discloses:

providing an emulation module interfacing directly with the operating system and

corresponding to the device/providing an emulation object interfacing directly with the

operating system and corresponding to the device /an emulation module interfacing

directly with the operating system and corresponding to the device/an emulation object

interfacing directly with the operating system and corresponding to the device (Col. 3,

lines 34-37, Col. 8, lines 62-68).

ensuring that the application will utilize the emulation module when the application is executed on the development system/ensuring that the application will utilize the emulation object.../means for ensuring.../wherein the application is capable of utilizing the emulation module in lieu of the device.../emulating the interaction...(Col. 6, line 66-Col. 7, line 4);

executing the application on the development system independently of the point of sale system, wherein the emulation module and the application emulate the interaction between the application and the device that occurs when the application is executed on the point of sale equipment/wherein the application is executed on the system, the emulation module and the application independently.../wherein the application is executed on the development system, the emulation module and the application emulate the interaction...(Col. 1, lines 60-62, Col. 1, line 66-Col. 2, line 1, Col. 2, lines 9-19, Col. 7, lines 32-38, [where the examiner is interpreting the "development system" and the "point of sale system" of the present invention to be analogous to the "host system" and "target system" of Binkley, et al);

wherein the emulation module and the application both interface directly with the operating system of the development system, (Col. 59, lines 31-38 and lines 54-61, [where the emulation module resides with the emulation processor and where the host system or development system's environment comprises device emulating means for directly interfacing with the target system I/O operation (application), See Col. 59, lines 54-61. It is also shown that the host/development system's environment comprises means for determining a current emulated state of the communication means, meaning the host/development system has direct contact with emulation means/modules (See Col. 59, lines 50-53]).

ensuring that the application adequately utilizes the emulation object...(Col. 2, lines 9-13);

modifying the application...(Col. 1, lines 11-14, Col. 2, lines 13-19).

allowing a developer to provide input...(Col. 50, lines 41-43);

providing the input to the application in a form expected...(Col. 51, lines 3-17).

Binkley, et al fails to teach the following, however, Weber discloses:

A point of sale environment/A point of sale system.../wherein the device is specialized for the point of sale equipment, (Col. 65, lines 54-63,w/ abstract, lines 1-11)

It would have been obvious to one of ordinary skill in the art for the device to be specialized for the point of sale equipment because the transactions that are being tested on a different computer in Weber (test gateway computer) are occurring in a pos environment. In this case, since transactions are occurring at a pos system, any device used at the pos must therefore be specialized or formatted to operate at the pos system.

As per claims 3, 10, Binkley, et al discloses:

wherein the application is platform independent...(Col. 58, line 46-Col. 59, line 10).

As per claim 5, 12, Binkley, et al discloses:

wherein the point of sale equipment includes a driver...(Col. 19, line 67-Col. 20, line 6).

As per claim 6, 13, Binkley, et al discloses:

wherein the emulation object emulates the driver and the device...(Col. 19, lines 11-15, Col. 19, line 67-Col. 20, line 6).

As per claims 4, 11, Binkley, et al fails to teach the following, however Weber discloses:

wherein the application is a JAVA application...(Col. 7, lines 15-17).

It would have been obvious to one of ordinary skill in the art to make the application and

the emulation object platform independent because in a computer environment,

applications are constantly being changed around and depending on these changes

and the needs of the user, the platforms will also need to change in order to fit the

environment. It would have been obvious to one of ordinary skill in the art to make the

application and the emulation object JAVA applications because JAVA is a common,

distributed programming language that is simple and is used for object-oriented

programming in the application development art.

(11) Response to Argument

First, appellant argues that Binkley in view of Weber neither teaches nor

suggests directly interfacing the application being developed for a POS system and the

emulation module emulating a specialized device for the POS system directly with the

operating system of the development system. However, the combination of Binkley and

Weber discloses this feature. Specifically, in Binkley, Col. 59, lines 31-38 and lines 54-

61, it is disclosed that the emulation module resides with the emulation processor and

that the host system or development system's environment comprises device-emulating

means for *directly interfacing* with the target system I/O operation or the application. In

addition, Col. 59, lines 50-53 of Binkley discloses that the host/development system's

environment comprises means for determining a current emulated state of the

communication means, meaning the host/development system has direct contact with

emulation means/modules.

Appellant also argues that any software module used to emulate devices in

Binkley will interface with different operating systems, and that the system of Binkley

uses separate host and emulation processors. However, the limitations of claim 1 do

not disclose using the same host and emulation processor, but merely discloses that the

emulation module and the application both interface directly with the operating system

of the development system (for one application) therefore, if there were more than one

application, the emulation module for that particular application and that application

would interface directly with the operating system of the development system for that

particular application, which, is different for the operating system for the first application.

In addition, as disclosed by appellant on page 8, lines 5-6 of the brief, the emulation

processor *would naturally run* the operating system and other applications for the target

system, therefore, it would also be natural and common in an emulation environment for

the application being developed to also interface with the operating system of the

emulation processor, in addition to the operating system of the development system in

order for emulation of that application to occur.

Appellant also argues that Weber fails to remedy the defects of Binkley and that

Weber does describe POS technology, and according to appellant, Weber relates to the

final POS system used by an end user, rather than a mechanism for testing applications

being developed for use with a POS system. However, Weber describes a system

where a merchant-controlled computer communicates with *a test gateway* by

transmitting messages over a communications channel that are related to transactions

to the test gateway computer (as shown in abstract). In addition, in Col. 65, lines 54-63,

Weber describes a POS application where a data structure representing a POS

transaction request is initiated. Therefore, Weber describes the testing of a POS

application. Since the test gateway of Weber responds with *simulated* transaction

responses that include configuration data that is used by the merchant-operated

computer to configure itself to access a production gateway computer, as described in

the abstract of Weber, the testing of the POS application is processed for an application being developed. In "The Authoritative Dictionary of IEEE Standards Terms", emulate is defined as follows: "A model that accepts the same inputs and produces the same outputs as a given system represented...See also: simulate". The term simulate is defined as follows: "To represent the functioning of one system by another...". Therefore, according to "The Authoritative Dictionary of IEEE Standards Terms", simulating is a form of emulating, but more specific to computer systems. Therefore, these simulated responses of Weber correspond to the emulated responses of the present invention.

Since all claims now stand and fall together, claims 2-15 are rejected for the same reasons as discussed above with respect to claim 1.

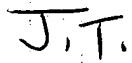For the above reasons, it is believed that the rejections should be sustained.
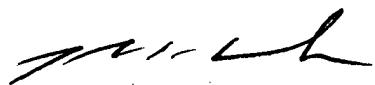
Respectfully submitted,

A. R. B.
June 9, 2005

Conferees
Akiba Robinson-Boyce

Susanna Diaz

Joseph Thomas

JOHN G. WEISS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

IBM CORPORATION
PO BOX 12195
DEPT 9CCA, BLDG 002
RESEARCH TRIANGLE PARK, NC 27709